



CEMENT PRODUCTION

RECYCLING OUR “DIRTY LAUNDRY”

BASICS OF CEMENT PRODUCTION

CEMENT BASICS

ENVIRONMENTAL
PROBLEMS

POSSIBLE
SOLUTIONS

CALERA &
EcoRock

IGEM PROJECTS



CEMENT
CYCLE



THE FLY IN THE OINTMENT

CEMENT BASICS

SIDE REACTIONS FROM CEMENT
PRODUCTION:

ENVIRONMENTAL
PROBLEMS

1. CALCINING OF LIMESTONE TO LIME
AND CARBON DIOXIDE

POSSIBLE
SOLUTIONS

2. FORMATION OF CALCIUM SILICATES
AND SIDE PRODUCTS (I.E. FLUE GAS)

CALERA &
EcoRock

IGEM PROJECTS

STANDARD SOLUTION: FLUE GAS TREATMENT

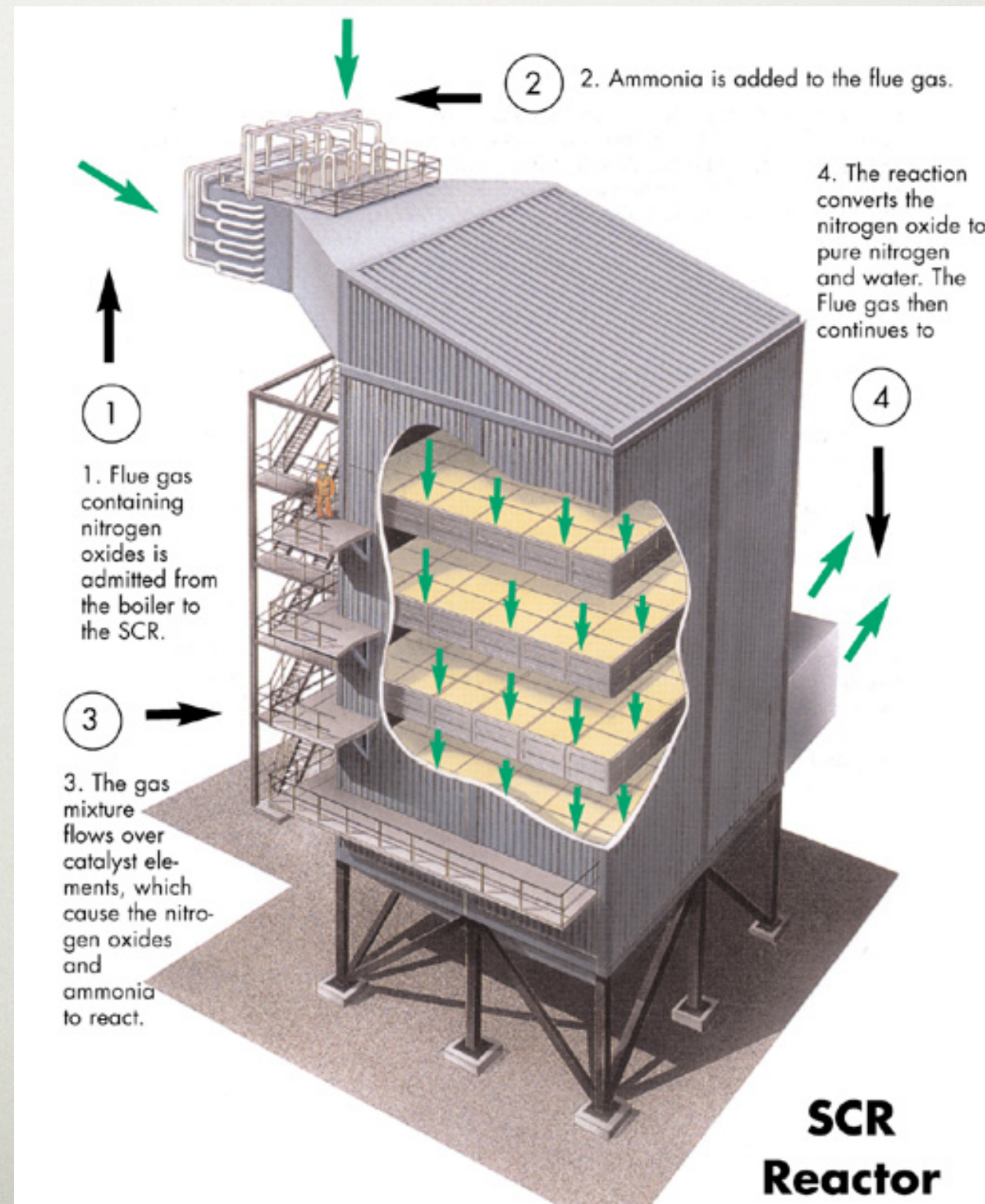
CEMENT BASICS

ENVIRONMENTAL
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CALERA &
EcoRock

IGEM PROJECTS



BETTER SOLUTION: CARBON SEQUESTRATION

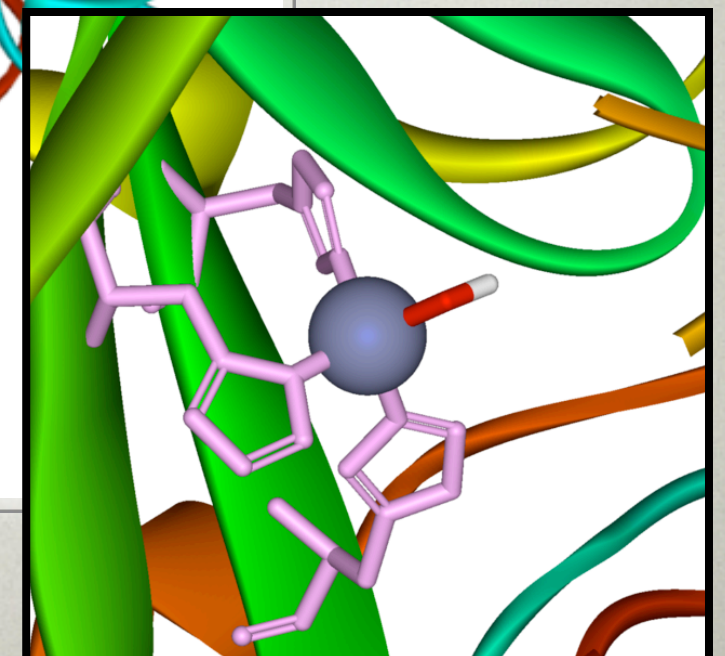
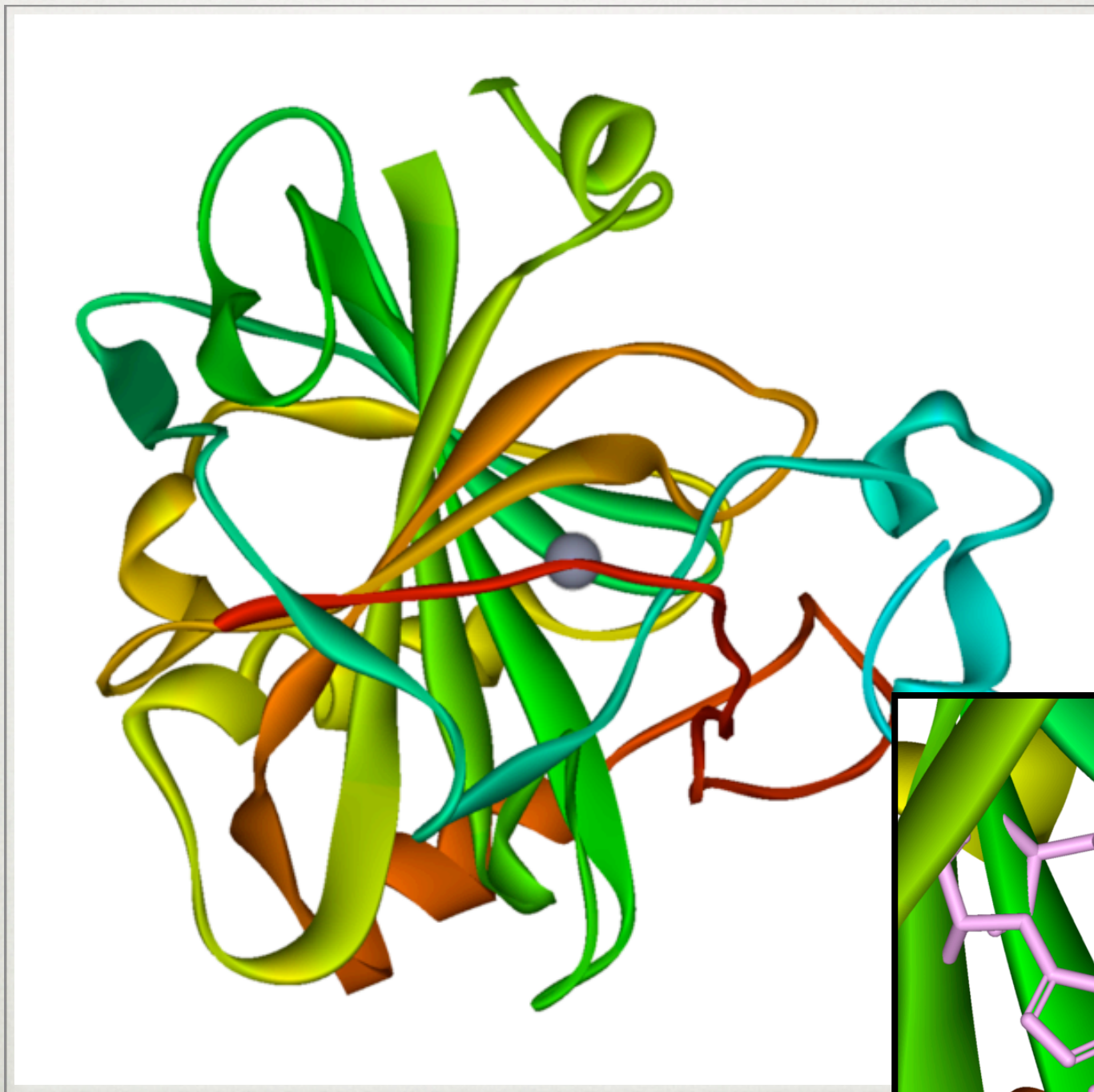
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STANFORD'S VERSION: CALERA

CEMENT BASICS

ENVIRONMENTAL
PROBLEMS

POSSIBLE
SOLUTIONS

CALERA &
EcoRock

IGEM PROJECTS

Calera Corporation

**“TURNING CARBON DIOXIDE
INTO CEMENT”**

TAKING THIS TO IGEM

CEMENT BASICS

ENVIRONMENTAL
PROBLEMS

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